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#### **MEETING OF THE**

# TRANSPORTATION CONFORMITY WORKING GROUP

Tuesday, April 22, 2008 10:00 a.m. – 12:00 p.m.

SCAG Offices
Riverside A Conference Room
818 West 7<sup>th</sup>, 12<sup>th</sup> Floor
Los Angeles, CA 90017
213.236.1800

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact:

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SCAG, in accordance with the Americans with Disabilities Act (ADA), will accommodate persons who require a modification of accommodation in order to participate in this meeting. If you require such assistance, please contact SCAG at (213) 236-1868 at least 72 hours in advance of the meeting to enable SCAG to make reasonable arrangements. To request documents related to this document in an alternative format, please contact (213) 236-1868.

## **Transportation Conformity Working Group**

## AGENDA

PAGE # TIME

#### 1.0 <u>CALL TO ORDER</u>

Michael Litschi, OCTA

#### 2.0 PUBLIC COMMENT PERIOD

Members of the public desiring to speak on an agenda item or items not on the agenda, but within the purview of the TCWG, must fill out a speaker's card prior to speaking and submit it to the Staff Assistant. A speaker's card must be turned in before the meeting is called to order. Comments will be limited to three minutes. The Chair may limit the total time for comments to twenty (20) minutes.

### 3.0 CONSENT CALENDAR

3.1 TCWG Minutes of March 25, 2008
Attachment

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#### 4.0 <u>INFORMATION ITEMS</u>

4.1	RTIP Update	John Asuncion, SCAG		10 minutes
4.2	SIP Update	Dennis Wade, ARB		15 minutes
4.3	RTP Update	Naresh Amatya, SCAG Jonathan Nadler, SCAG		15 minutes
4.4	Review of PM Hot Spot Interagency Review Forms Attachment	TCWG Discussion	9	30 minutes
4.5	Review of Qualitative PM Hot Spot Analysis Attachment	TCWG Discussion	25	10 minutes
4.6	Projects Requiring Follow-up  LA0D45 Wilshire Blvd. Bus-Only Lane Project	TCWG Discussion		20 minutes

### 5.0 <u>INFORMATION SHARING</u>

5 minutes



# **Transportation Conformity Working Group**

# AGENDA

PAGE #

TIME

### 6.0 <u>ADJOURNMENT</u>

The next meeting of the Transportation Conformity Working Group will be on Tuesday, May 27, 2008 at the SCAG office in downtown Los Angeles.



## 3.1 Minutes

#### March 25, 2008 Minutes

THE FOLLOWING MINUTES ARE A SUMMARY OF THE MEETING OF THE TRANSPORTATION CONFORMITY WORKING GROUP. AN AUDIOCASSETTE TAPE OF THE ACTUAL MEETING IS AVAILABLE FOR LISTENING IN SCAG'S OFFICE.

The Meeting of the Transportation Conformity Working Group was held at the SCAG office in Los Angeles.

#### **In Attendance:**

Abrishami, Lori MTA

Gutierrez, Jose City of Los Angeles

**OCTA** Litschi, Michael Shavit, Avital **MTA** 

Williams, Leann Caltrans District 7

#### **SCAG Staff**

Acebo, Mervin Amatya, Naresh Asuncion, John Ayala, Rosemary Del Rosario, Sheryll Lo, Sofia

Nadler, Jonathan Patsaouras, Sylvia Sherwood, Arnie

#### Via Teleconference:

Behtash, Arman Caltrans District 12 Caltrans Headquarters Brady, Mike

Cacatian, Ben Ventura County Air Pollution

Chandon, Nina Caltrans District 8

Chattman, Karen TRC

Fagan, Paul Caltrans District 8 Gallo, Ilene Caltrans Headquarters Jeffery, Edison Caltrans District 8 Johnson, Sandy Caltrans District 11

#### March 25, 2008 Minutes

Kennedy, Eileen Caltrans District 12 Lay, Keith LSA & Associates

Lopez, Rosa IVAG

Louka, Tony Caltrans District 8

Louis, MonicaARBMedina, ShirleyRCTCNoch, MichelleFHWA

O'Connor, Karina EPA Region 9 Pirveysian, Zorik SCAQMD

Yoon, Andrew Caltrans District 7

Sells, Eyvonne SCAQMD Wade, Dennis ARB

#### 1.0 CALL TO ORDER

Michael Litschi, OCTA, called the meeting to order at 10:05 a.m.

#### 2.0 PUBLIC COMMENT PERIOD

There were no comments.

#### 3.0 CONSENT CALENDAR

#### 3.1 Approval Item

#### 3.1 TCWG February 26, 2008 Meeting Minutes

The minutes were approved with a correction to the typo in the date of the heading (i.e., 2007 will be corrected to 2008).

#### 4.0 INFORMATION ITEMS

#### 4.1 RTIP Update

John Asuncion, SCAG, reported that 2006 RTIP Amendment No. 14 was approved by Caltrans on March 14, 2008. SCAG sent a packet to Caltrans for 2006 RTIP Amendment No. 15 on March 24, 2008. The 2006 RTIP Amendment to ensure consistency with the 2008 RTP will be approved

#### March 25, 2008 Minutes

concurrently with the 2008 RTP at the Regional Council meeting in May. Staff continues to work diligently on the 2008 RTIP development.

#### 4.2 SIP Update

Dennis Wade, ARB, provided a SIP update. ARB plans to adopt ozone Early Progress Plans to establish transportation emission budgets for Ventura County, Western Mojave Desert, Coachella Valley, Eastern Kern County and Imperial County. In the past, these conformity budgets would have been set with reasonable further progress (RFP) plans. However, the U.S. EPA is revising the requirements for RFP plans and will not approve RFP plans for these areas until the new requirements are in place. Setting conformity budgets with the Early Progress Plans will allow transportation planning to move forward while EPA revises the requirements for RFP plans.

Ozone plans for Ventura and Western Mojave, and ozone and PM10 plans for Imperial County, are in the process of being prepared.

Jonathan Nadler, SCAG, stated that SCAG staff has worked closely with the ARB on the Early Progress Plans to ensure data accuracy and the adequacy of the budgets relative to conformity.

#### 4.3 RTP Update

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Naresh Amatya, SCAG, stated that the public comment period for the Draft 2008 RTP closed on February 19<sup>th</sup>. The comments are available on SCAG's website. Currently, staff is working on the response to the comments. On March 6, the SCAG Community, Economic and Human Development (CEHD) Committee recommended approval of the 2008 RTP Growth Forecast to the Regional Council. The CEHD recommended the baseline growth forecast as the 2008 RTP Growth Forecast with advisory land use policies and strategies.

On March 19<sup>th</sup>, a special meeting of the SCAG Transportation and Communications Committee (TCC) was held to discuss two projects: 1) the Orangeline High Speed Maglev that would connect southern Orange County with northern Los Angeles County; and 2) the CETAP Corridor B. Both of

#### March 25, 2008 Minutes

the projects were discussed, however no action was taken at that meeting. The TCC is scheduled another meeting on April 3<sup>rd</sup>.

There was a meeting of the RTAC, the consultation requirement between all the County Commissions per AB-1246. The primary issues discussed at the meeting were the growth forecast and the Orangeline and CETAP projects.

Staff anticipates the RTP to be taken to the Regional Council for adoption on May 8<sup>th</sup>. SCAG has agreed with FHWA to submit the final adopted plan to the federal agencies by May 16<sup>th</sup> for their review. FHWA and FTA have agreed to an expedited review of the RTP considering that the existing conformity finding expires on June 7<sup>th</sup>.

A question was raised relative to projects included in the part of the RTP known as the Strategic Plan. The Strategic Plan includes those projects which merit further study and that, over time and with further consensus building, may move forward into the constrained RTP. The conformity analysis is performed on those projects included in the fiscally constrained RTP.

Jonathan Nadler, SCAG, and Dennis Wade, ARB, briefed the TCWG on the transportation emission budgets, specifically as they relate to South Coast. During EPA's review of the South Coast ozone and PM2.5 emission budgets, concern was raised relative to the emission reduction assumptions prior to 2014. ARB discussed these issues with EPA, SCAG and South Coast AQMD.

These discussions led to ARB developing two sets of emission budgets for EPA's consideration. The first (preferred) set reflects the 2007 SIP submittal for the South Coast Air Basin, including the locally adopted 2007 AQMP and the 2007 State Strategy adopted by ARB. The second set of budgets reflects control measures adopted as of October, 2006 – the rules that formed the baseline emission inventory used in the development of the 2007 SIP. SCAG's revised conformity analysis demonstrates conformity with either set of budgets (or any iteration of budgets that may be deemed adequate by EPA).

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Based on these considerations, the RTP schedule is as follows:

- SCAG will release a revised conformity report by the end of this week. The ARB will consider the revised budgets at its April 24 hearing.
- EPA will parallel process review of the revised budgets with ARB's public comment period.
- SCAG's Regional Council would take action on the RTP and conformity finding on May 8<sup>th</sup>.
- FHWA has agreed to expedite their review and has requested that the RTP be submitted to them by May 16<sup>th</sup>.

Jonathan Nadler also discussed the analysis of timely implementation of Transportation Control Measures (TCMs). It was noted that as SCAG is proceeding with the conformity analysis for the 2008 RTP, staff is also working on the conformity analysis 2008 RTIP. As part of this process, MTA has identified two projects with completion dates in 2010 that may have implementation obstacles: 1) a ½ mile bike lane and, 2) a bus stop improvement program. MTA has identified two new projects which can readily substitute for the original two projects. MTA has formally requested that SCAG begin the substitution process. The TCWG agreed that it was necessary to arrange a follow-up call with the FHWA to make sure that the schedule does not interfere with other planning requirements for the projects.

MTA has also identified a project that was incorrectly labeled as a TCM. The proposed project is reconstruction of a facility demolished as part of the Westlake/McArthur Park Metro Red Line Station. It is a mixed-use, transitoriented development that would include retail space and housing units. The project does not include a park-in-ride facility nor does it include the development of an integrated system of vanpool or carpooling. The parking mainly serves the retail and housing components and its use for vanpool or carpooling is incidental. MTA is requesting that we correct the designation of this project.

There was consensus on these MTA projects relative to timely implementation.

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#### 4.4 Review of PM Hot Spot Interagency Review Forms

1) LA0F098 – Construct one/two-lane bridge structure, branching off Southbound of Route 605 to Eastbound of Route 10 at-grade connector ramp.

Not a POAQC

**2) ORA000161** – Improvements to State Route 55, Newport Bl. from 17<sup>th</sup> Street to 19<sup>th</sup> Street in the City of Coast Mesa

Not a POAQC.

3) RIV010208 – Replace existing two-lane I-15/Cajalco Road overcrossing with a new six-lane overcrossing, eliminating the gap on Cajalco Road

Not a POAQC.

#### 4.5 Review of Qualitative PM Hot Spot Analysis

**LA0D45** – Schuyler Heim Bridge Replacement and SR-47 Expressway Project

The Qualitative PM Hot Spot Analysis for LA0D45 was resubmitted to the TCWG on March 25, 2008 (originally submitted October 2006). The scope of the project has been changed to include an additional two-lane, elevated flyover structure from eastbound Ocean Boulevard to northbound SR-47. Alternative 1: Bridge Replacement and Expressway, has been selected as the Preferred Alternative. The revised qualitative PM Hot Spot Analysis was deemed tentatively acceptable for NEPA circulation by Caltrans and FHWA, awaiting approval from EPA.

#### 4.6 Projects Requiring Follow-Up

Andrew Yoon, Caltrans, discussed a proposed project that would be combined with LALS02. The proposed project is similar in scope and

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involves the repair, rehabilitation, and/or construction of a new bridge on SR-39. The TCWG determined that the original determination of not a POAQC for LALS02 can be applied to this new project. However, the TCWG requested that the project sponsor submit a revised PM Hot Spot Interagency Review Form to reflect the adjusted milepost markers.

#### 5.0 CHAIR'S REPORT

No new items to report.

#### 6.0 <u>INFORMATION SHARING</u>

No items.

#### 6.0 ADJOURNMENT

Michael Litschi adjourned the meeting at 11:05 a.m.

The next Transportation Conformity Working Group meeting will be held on April 22, 2008 at the SCAG office in Los Angeles.

4.4 Review of PM Hot Spot Interagency Review Forms RTIP ID# (required) ORA120359

#### **TCWG Consideration Date**

#### Project Description (clearly describe project)

This is an operational improvement project on southbound Route 5 (SB I-5) between Tustin Ranch Rd and Jamboree Rd in the Cities of Irvine and Tustin. It proposes to construct a second 12-ft wide auxiliary lane and a 10-ft wide shoulder from Tustin Ranch Rd on-ramp to Jamboree Rd off-ramp, which includes a 14-ft bridge widening at El Modena-Irvine Channel Bridge and two retaining walls.

A 12-ft wide outside lane and 8-ft wide shoulder will added along Jamboree Rd off-ramp to provide for two lanes exiting at the freeway and four lanes at the off-ramp intersection with Jamboree Road.

#### Type of Project (use Table 1 on instruction sheet)

Change to existing State Highway

County Narrative Location/Route & Postmiles

Orange On SB I-5 between Tustin Ranch Rd & Jamboree Rd. PM 27.6/28.1

Caltrans Projects – EA# 0G9900

**Lead Agency: Caltrans** 

 Contact Person
 Phone#
 Fax#
 Email

 Fred Faizi
 (949) 724-2145
 (949) 724-2591
 fred\_faizi@dot.ca.gov

Hot Spot Pollutant of Concern (check one or both) PM2.5 X PM10 X

Federal Action for which Project-Level PM Conformity is Needed (check appropriate box)

X Ex	ategorical xclusion IEPA)	EA or Draft EIS	FONSI or Final EIS	PS&E or Construction	Other
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#### **Scheduled Date of Federal Action:**

**NEPA Delegation – Project Type** (check appropriate box)

Exempt

Section 6004 – Section 6005 – Non-Categorical Exemption

Section 6005 – Non-Categorical Exemption

Current Programming Dates (as appropriate)

	PE/Environmental	ENG	ROW	CON
Start	05/04/05	07/01/08	04/26/05	10/01/11
End	07/01/08	11/01/09	08/01/09	06/01/12

#### Project Purpose and Need (Summary): (attach additional sheets as necessary)

The primary objective of the project is to minimize congestion on southbound I-5 at Jamboree Road off-ramp during both AM and PM peak hours. This congestion results due to inadequate storage capacity of Jamboree Road off-ramp. The primary accident pattern are rear-end accidents during congested conditions. Making capacity enhancements to the Jamboree Road off-ramp can relieve these types of accidents.

Improvements along the southbound I-5 and Jamboree Road off-ramp are needed to alleviate the congestion occurring during AM and PM peak hours. It was observed that the existing auxiliary lane on southbound I-5 between Tustin Ranch Road on-ramp and Jamboree Road off-ramp is congested during both AM and PM peak hours. Traffic backup extends up to Tustin Ranch Road on-ramp. This causes breakdown of weaving to and from the existing auxiliary lane. The Tustin Ranch Road on-ramp traffic attempting to enter the mixed-flow lanes of the southbound I-5 faces a high volume of traffic exiting Jamboree Road that exceeds the capacity of the off-ramp. The traffic volume at the Jamboree Road off-ramp in the AM peak hours is beyond the standard capacity of 1500 vph for a single-lane exit ramp at the exit nose.

Surrounding Land Use/Traffic Generators (especially effect on diesel traffic)

Commercial

Opening Yea(2012): Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

**<u>Build</u>**: LOS: B, AADT: 286,200, Trucks: 6.25%

**No Build:** LOS: F, AADT: 286,200, Trucks: 6.25%

RTP Horizon Year / Design Year(2032): Build and No Build LOS, AADT, % and # trucks, truck AADT of

proposed facility

**Build:** LOS: D, AADT: 345600, Trucks: 6.65% **No Build:** LOS: F, AADT: 345600, Trucks: 6.65%

Opening Year(2012): If facility is an interchange(s) or intersection(s), Build and No Build cross-street

Jamboree Road:

**<u>Build:</u>** AADT: 63,070, No Truck data is available

AADT, % and # trucks, truck AADT

**No Build:** AADT: 63,070, No Truck Data is available.

RTP Horizon Year / Design Year(2032): If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Jamboree Road:

**Build:** AADT: 76,160, No Truck data is available

No Build: AADT: 76,160, No Truck data is available

**Describe potential traffic redistribution effects of congestion relief** (*impact on other facilities*) There will be no potential traffic redistribution effects as a result of this project. By adding an auxiliary lane, the traffic flow during the peak hours will improve which will allow the traveling vehicles operate at higher speeds

and therefore, it will reduce engine emissions.

Comments/Explanation/Details (attach additional sheets as necessary)

The proposed improvements will relieve the congestion at the Jamboree Road off-ramp and the traffic backup on the existing auxiliary lane. This would create additional storage for the off-ramp traffic and would improve traffic flow from Tustin Ranch Road on-ramp entering the southbound I-5 mixed –flow lanes. Therefore, it will improve weaving along the segment.

RTIP ID# (required) ORA000193

TCWG Consideration Date: April 22, 2008

#### Project Description (clearly describe project)

The State Route 22 West Orange County Connection Phase II (SR-22/WOCC Phase II) project will add High Occupancy Vehicle (HOV) bridge structures to provide direct freeway-to-freeway HOV lane connectors at the SR-22/I-405 and I-405/I-605 interchanges. The HOV lane direct connectors will allow the HOV system to accommodate long distance travel for carpools and buses, while enabling the smooth flow of vehicles between freeways to avoid chokepoints at these major interchanges. The WOCC Phase II project will also add an HOV lane in each direction on I-405/SR-22 (on the freeway section between the SR-22/I-405 and I-405/I-605 HOV lane direct connectors) to safely accommodate traffic movements in and out of the HOV lanes within the project area.

A Final Environmental Impact Report/Environmental Impact Statement (FEIS/EIR) was prepared and adopted for the project (for both Phases I and II) and the Record of Decision was issued by the Federal Highway Administration (FHWA) in 2003. The FEIS/EIR included a determination that the project would not cause  $PM_{10}$  hot spots and is <u>not</u> a project of air quality concern for  $PM_{10}$  emissions. Construction of Phase I of the SR-22 WOCC project is nearly complete and the current Phase II project area is the only portion of the project that currently requires a conformity determination for  $PM_{2.5}$  emissions.

Type of Project (use Table 1 on instruction sheet)

Change to existing state highway

# **County** Orange

#### Narrative Location/Route & Postmiles:

- SR-22 from the east side of the Valley View St interchange to just west of the I-405/I-605 junction: 12 ORA-22 PM 1.2/0.66;
- I-405 from SR-22 junction to I-405/I-605 junction: 12 ORA-405 PM 20.56/23.98; and
- I-605 from I-405 junction to Katella Avenue: 12 ORA-605 PM 0.0/1.0.

**Caltrans Projects** – An Environmental Re-Evaluation/Addendum is currently being prepared (**EA#**'s **071631 and 071621**) that addresses the Final EIR/EIS that was approved for the project in 2003 (EA#'s 071630 and 071620).

**Lead Agency:** Orange County Transportation Authority

Contact PersonPhone#Fax#Email<br/>RCasey@<br/>octa.net

Hot Spot Pollutant of Concern (check one or both) PM2.5 X PM10

Federal Action for which Project-Level PM Conformity is Needed (check appropriate box)

Categorical Exclusion (NEPA)

EA or Draft EIS

FONSI or X PS&E or Construction

Other

Scheduled Date of Federal Action: July 2008 (estimated date for FHWA air quality conformity determination)

**NEPA Delegation – Project Type** (check appropriate box)

Section 6004 – X Section 6005 – Non-Categorical Exemption

Current Programming Dates (as appropriate)										
	PE/Environmental	ENG	ROW	CON						
Start	Final EIS/EIR adopted in 2003	October 2007	November 2008	March 2010						
End	Environmental Re- Evaluation/Addendum (internal documentation) to be completed in Summer 2008	June 2009	June 2009	Sept. 2013						

Project Purpose and Need (Summary): (attach additional sheets as necessary)

The purpose of the SR-22/WOCC Phase II project is to improve both existing and future mobility and enhance safety throughout the transportation corridor while minimizing environmental and economic impacts. Under existing conditions, the project area experiences high levels of congestion, high accident rates, and reduced travel speeds which are a result of several contributing factors. With projected population and employment growth trends indicating increased transportation volumes, this situation is expected to worsen. Key areas of concern in the project area are: 1) the lack of continuity between HOV and non-HOV facilities; 2) inadequate weaving distances along the freeway due to the close proximity of on/off-ramps and freeway-to-freeway mainline connectors along the mainline; and 3) there is little incentive or opportunity for individual drivers to switch from single-occupancy vehicles (SOVs) to carpooling or transit without dedicated facilities for this purpose.

The project seeks to accomplish the following goals:

- Improve mobility and reduce congestion in the SR-22/WOCC study area
- Maximize cost-effectiveness of the SR-22/WOCC improvements
- Minimize adverse and maximize beneficial environmental impacts to SR-22/WOCC communities
- Minimize negative and maximize positive economic impacts to SR-22/WOCC communities

Currently, the project area has insufficient capacity on both the freeway and major adjacent surface streets to handle existing and projected future travel demand through the project area. Prior to the recent construction of HOV lanes on the SR-22 freeway (between SR-55 and Valley View Street) as part of the SR-22/WOCC Phase I project, the SR-22 corridor was a missing link in the Orange County HOV system. The SR-22/WOCC Phase II improvements would provide for HOV system continuity and connectivity, tying to I-605 and I-405, thereby helping to improve congestion locally. The traveling public has little incentive or opportunity to switch from single-occupancy vehicles (SOVs) to carpooling or transit without dedicated facilities for this purpose. That is, if SOV drivers cannot decrease their commute times because there are missing links in the HOV system, they are more likely to forego carpooling or using transit in favor of driving alone.

The SR-22/WOCC Phase II project would provide connectivity for the HOV system while meeting the goals and objectives of the project and provide the infrastructure needed to encourage high vehicle occupancy on the region's roads. This would indirectly relieve traffic congestion in the region, both by removing HOVs from general-purpose lanes and by encouraging SOVs to shift their modal choice from drive-alone to carpool. In addition, the project provides an opportunity to implement Transportation System Management (TSM) and Transportation Demand Management (TDM) strategies within the project area.

#### Surrounding Land Use/Traffic Generators (especially effect on diesel traffic)

The SR-22/I-405/I-605 interchanges are located adjacent to urbanized areas of the cities of Garden Grove, Westminster, Seal Beach, Long Beach, and the community of Rossmoor. The areas surrounding the interchanges are densely populated with residential, commercial, retail, hotel, and community facility uses. The Seal Beach Naval Weapons Station runs along the southern boundary of the project area. The western terminus of SR-22 (adjacent to the western boundary of the project area) and freeway interchanges with arterial streets within the project area provide key regional access route to and from the adjacent cities.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility:

	<u>Table 1</u>									
	AADT - Study Base Year (1996) and Current Year (2006)									
		Study Base Year (1996)			Current Year (2006)					
	Study Segment	Heavy Truck Heavy % of			Total	Heavy Truck	Heavy Truck % of			
Freeway	Between	AADT	AADT	Total AADT	AADT	AADT	Total AADT			
Without Pro	oject (No Build)									
SR-22	Both Directions: East of I-405 Junction	118,000	1,940	1.64%	147,000	2,417	1.64%			
I-405	Both Directions: SR-22 Junction to I-605	328,000	5,747	1.75%	390,000	4,901	1.26%			
I-605	Both Directions: North of I-405 Junction	166,000	3,355	2.02%	186,000	2,880	1.55%			

Sources: SR-22 West Orange County Connection - Final EIS/EIR (OCTA, 2003);

1996 Annual Average Daily Truck Traffic on the California State Highway System (Caltrans, 1997); and

2006 Annual Average Daily Truck Traffic on the California State Highway System (Caltrans, 2007).

Notes: AADT = Annual Average Daily Traffic; N/A = Data Not Available or Applicable; SR = State Route; I = Interstate

Table 2										
PM Peak Hour LOS - Study Base Year (1996) and Current Year (2006)										
		Study	Base Y	ear (19	996)	Cui	rrent Yea	r (200	6)	
			ieral e Lanes	Н	ov	General Purpose Lanes		HOV		
Freeway	Study Segment Between	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
Without Pro	oject (No Build)									
EB SR-22	SR-22/I-405 to Valley View St	N/A	N/A			N/A	N/A		-	
WB SR-22	Valley View St to SR-22/ I- 405	N/A	N/A			N/A	N/A		-	
NB I-405	SR-22/I-405 to Seal Beach Blvd	0.85	Е	N/A	N/A	0.85	E	N/A	N/A	
NB I-405	Seal Beach Blvd to I-605	0.79	D	N/A	N/A	0.81	D	N/A	N/A	
SB I-405	I-605 to Seal Beach Blvd	0.79	D	N/A	N/A	0.91	Е	N/A	N/A	
NB I-605	I-405 to Katella Ave	N/A	N/A			N/A	N/A			
SB I-605	Katella Ave to I-405	0.78	D			0.75	D			

Sources: SR-22 West Orange County Connection - Final EIS/EIR (OCTA, 2003); and Parsons, 2008.

 $\underline{Notes:} \ HOV = High \ Occupancy \ Vehicle; \ LOS = Level \ of \ Service; \ V/C - Volume \ to \ Capacity \ ratio; \ N/A = Data \ Not \ Available;$ 

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; SR = State Route; I = Interstate.

-- = No HOV Lane present.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility:

<u>Table 3</u> AADT - Design Year (2020)									
		2020 W	2020 Without Project (No Build)			2020 With Project (Build)			
Freeway	Study Segment Between	Heavy Heavy Truck % Total Truck of Total t Between AADT AADT AADT				Heavy Truck AADT	Heavy Truck % of Total AADT		
SR-22	Both Directions: East of I-405 Junction	150,100	2,462	1.64%	162,000	2,657	1.64%		
I-405	Both Directions: SR-22 Junction to I-605	370,500	4,668	1.26%	384,100	4,840	1.26%		
I-605	Both Directions: North of I-405 Junction	165,500	2,565	1.55%	175,100	2,714	1.55%		

<u>Sources:</u> *SR-22 West Orange County Connection - Final EIS/EIR* (OCTA, 2003); and Parsons, 2008. <u>Notes:</u> AADT = Annual Average Daily Traffic; SR = State Route; I = Interstate

<u>Table 4</u>							
Peak Hour Total Traffic Volumes and Truck % on Connectors - Design Year (2020)							
	2020 With	2020 Without Project (No Build) 2020 With Project (					
			Heavy				
	AM Peak	PM Peak	Truck % of	AM Peak	PM Peak	Heavy Truck	
Location	Hour	Hour	Volume	Hour	Hour	% of Volume*	
General Purpose Conn	ector						
SB I-605 to SB I-405	2,320	2,600	2.02%	2,410	2,830	2.02%	
NB I-405 to NB I-605	3,470	3,010	1.75%	3,970	3,280	1.75%	
SB I-405 to EB SR-22	4,190	6,510	1.75%	4,250	6,520	1.75%	
WB SR-22 to NB I-405	6,540	5,160	1.64%	6,700	5,470	1.64%	
Freeway-to-Freeway Di	rect HOV La	ane Connec	tor				
SB I-605 to SB I-405				720	850	0%	
NB I-405 to NB I-605				550	1,120	0%	
SB I-405 to EB SR-22				530	1,150	0%	
WB SR-22 to NB I-405				710	850	0%	

Sources: SR-22 West Orange County Connection - Final EIS/EIR (OCTA, 2003); and Parsons, 2008.

Notes: EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; SR = State Route; I = Interstate;

HOV = High Occupancy Vehicle.

Also see Table 5 on next page.

<sup>-- =</sup> Direct HOV Lane Connector not present under No Build condition.

<sup>\*</sup> Heavy (4+ axle) trucks are not allowed in HOV lanes, so the general purpose connectors would carry all heavy trucks traveling within the study area.

	<u>Table 5</u> Peak Hour LOS - Design Year (2020)									
			2020 Without Project (No Build)				2020 With Project (Build)			
	Study Segment	Pur	ieral oose nes	Н	ΟV	Pur	eral oose nes	HOV		
Freeway	Between	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	
EB SR-22	SR-22/I-405 to Valley View St	0.94	E			0.94	E	0.77	D	
WB SR-22	Valley View St to SR-22/ I-405	0.75	D			0.79	D	0.57	С	
NB I-405	SR-22/I-405 to Seal Beach Blvd	0.86	E	0.47	С	0.90	E	0.67	С	
NB I-405	Seal Beach Blvd to I-605	0.84	D	0.63	С	0.87	E	0.75	D	
SB I-405	I-605 to Seal Beach Blvd	1.08	F	0.95	E	1.09	F	0.84	D	
SB I-405	Seal Beach Blvd to SR-22/I-405	1.06	F	0.71	D	1.07	F	0.82	D	
NB I-605	I-405 to Katella Ave	0.63	С			0.70	D	0.75	D	
SB I-605	Katella Ave to I-405	0.70	D			0.65	С	0.57	С	

Sources: SR-22 West Orange County Connection - Final EIS/EIR (OCTA, 2003); and Parsons, 2008.

Notes: HOV = High Occupancy Vehicle lanes; V/C - Volume to Capacity ratio; LOS = Level of Service;

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; SR = State Route; I = Interstate.

<sup>-- =</sup> HOV Lane not present under No Build condition.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT:

See Tables 1 and 2 above

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT:

See Tables 3, 4, and 5 above

**Describe potential traffic redistribution effects of congestion relief** (*impact on other facilities*): Some traffic delays can be expected during construction of the SR-22/WOCC Phase II project. However, the traffic impacts during construction are only temporary in nature and will cease upon completion of construction activities.

During the operation phase, the direct freeway-to-freeway HOV lane connectors at the SR-22/I-405 and I-405/I-605 interchanges will allow the regional HOV system to accommodate long distance travel for carpools and buses, while enabling the smooth flow of vehicles between freeways to avoid chokepoints at these major interchanges. The direct freeway-to-freeway HOV lane connectors would not add capacity to the freeways and would not cause a redistribution of local or regional traffic. Rather, the SR-22/WOCC Phase II project would improve overall traffic operations and safety within the project area, and improve regional HOV system performance.

#### Comments/Explanation/Details (attach additional sheets as necessary):

The addition of HOV lanes within the project area and direct freeway-to-freeway HOV lane connectors at the SR-22/I-405 and I-405/I-605 interchanges are not predicted to change the number or percentage of diesel trucks on the project area freeway segments. By definition, only high occupancy vehicles or buses would use the new HOV lanes and direct freeway-to-freeway HOV lane connectors. On California freeways, medium- and heavy-duty trucks must remain in the two right-hand lanes and would not be eligible to use the proposed HOV facilities. Express bus service provided by Orange County Transportation Authority (OCTA) would operate along the SR-22/I-405 and I-405/I-605 HOV Connectors. In keeping with SCAQMD's Rule 1192, OCTA has been in the process of phasing out its fleet of diesel transit vehicles in favor of zero emissions and ultra low emissions buses. According to the bus replacement schedules developed by OCTA, all of OCTA's diesel buses will be retired by year 2010. Based on current timetables, the SR-22/I-405 and I-405/I-605 HOV Connectors would open no sooner than 2014. Therefore, any potential hazardous effects of diesel emissions would not be worsened by the proposed direct HOV connectors.

Under the requirements of the CAAA and TEA-21, proposed transportation projects must be derived from a fiscally-constrained Regional Transportation Plan (RTP) that conforms to the State Implementation Plan (SIP). The SIP is the document that sets forth the state's strategies for achieving Federal air quality standards. Projects must also be included in a Federally-approved Transportation Improvement Program (TIP) that conforms with the SIP, and proposed projects must not cause or contribute to localized exceedances in nonattainment and maintenance areas for PM<sub>10</sub>, PM<sub>2.5</sub>, and other pollutants.

The SCAG Regional Council found the 2006 RTP to conform to the purposes of the SIP and adopted the 2006 RTP for the six-county SCAG region. Federal approval of the 2006 RTP was obtained in 2007. The major elements that comprise the design concept and scope of the SR-22/WOCC Phase II project are included in the 2006 RTP and are summarized as follows:

- HOV Connector, I-405 @ SR-22
- HOV Connector, I-605 @ I-405

The elements of the SR-22/WOCC Phase II project are included and modeled in the adopted 2006 Regional Transportation Improvement Program (RTIP) as **Project ID # ORA000193**, **Model # 0343**, and described as "SR-22/I-405 and I-405/I-605 Interchanges – HOV to HOV Lane Connectors". The design of the project has been included in the 2006 RTIP and Draft 2008 RTP with a construction completion date of 2014. Therefore, the SR-22/WOCC Phase II project is in conformity with the SIP and is consistent with the requirements of the Transportation Conformity Rule. The 2006 RTIP and Federal Transportation Improvement Programs (FTIP) were approved by FHWA in 2007 into the Federal Statewide Transportation Improvement Program (FSTIP). The FSTIP is the final conformity document for the TIP.

In addition, the SR-22/WOCC Phase II project is a Transportation Control Measure (TCM) as defined in the AQMP and SIP, as well as in the RTP and RTIP. TCM is a project or program that is designed to reduce air quality emissions. TCMs are referenced in the State Implementation Plan (SIP) for the applicable air basin and have priority for programming and implementation ahead of non-TCMs projects. As part of SCAG's RTP/RTIP, this project has undergone air quality conformity analysis for the South Coast Air Basin (SCAB).

Based on quantitative CO and qualitative PM<sub>10</sub> hot-spot assessments completed as part of the SR-22/WOCC FEIS/EIR, it was previously determined that the project will not cause or contribute to localized violations of NAAQS standards.

In consideration of the above information, the SR-22/WOCC Phase II project is not expected to introduce significant amounts of diesel truck traffic, would not generate additional diesel truck traffic above levels anticipated without implementation of the project, and is in compliance with the SIP/TIP. Therefore, the project is not considered a project of significant concern per the definition contained within 40 CFR 93.1.126(b)(1).

# PM Conformity Hot Spot Analysis Project Summary Form for Interagency Consultation

RTIP ID# (required) RIV 001203 and RIV 990727							
TCWG Consid	deration	Date					
Project Descr	iption (c	learly	describe proje	ect)			
intersection wit and standards.	Widen Indian Canyon Drive for a distance of approximately 1,219 meters (4,000 feet) south of its intersection with Garnet Avenue (south of I-10) in accordance with Department and FHWA regulations and standards. The Indian Canyon Drive Bridge, which crosses over the Union Pacific Railroad tracks, would be widened. See Figures 1-1, 1-2, and 1-3.						
from its current (86 feet) to protect the Union additional lane project would a pavement most bridge structure 218-meter-long south of the bridge structure.	The Build Alternative (Locally Preferred) proposes to expand Indian Canyon Drive from its current width of 10.5 meters (34 feet) at the two lane locations to 26 meters (86 feet) to provide three traffic lanes in each direction. The existing two-lane bridge over the Union Pacific Railroad tracks would be widened on the west side to accommodate the additional lanes. The bridge is currently a three-span, concrete deck structure with steel girders. The project would stay within existing right-of-way boundaries and would keep the east edge of the existing pavement mostly in place. The roadway would be expanded primarily along the west side. The existing bridge structure would also be widened on the west side. A maximum 6.7-meter-high (22-foot-high), 218-meter-long (714-foot-long) retaining wall would be required on the west side of the road, to the south of the bridge, between Palm Springs Station Road and Indian Canyon Drive.						
Type of Project Change to exist	•			•			
Change to exis	sting regi	Ullally	Significant Sire	<del>2</del> 61			
<b>County</b> Riverside	The pro Californ meters project	oject is nia. Th (860 f bounc	ne subject road feet) south of P	northern porti segment exter Palm Springs S t south of Inter	on of Palm nds from ( station (Fig	ures 1-1 and 1-2	approximately 262
	Caltran	ıs Pro	jects – EA# 9	965100			
Lead Agency:	Caltran	IS					
Aaron P. Burto Acting Environ Assistance Ch	n mental L	.ocal	<b>Phone#</b> (909) 388-18	604	Fax# (909) 383	3-1009	Email aaron_burton@d ot.ca.gov
Hot Spot Polli	utant of	Conc	ern (check one	or both) PN	2.5 P	PM10 X	
Federal Action for which Project-Level PM Conformity is Needed (check appropriate box)							
Excl	Categorical Exclusion (NEPA)  X EA or FONSI or Final or Construction		Other				
Scheduled Da November 2008	Scheduled Date of Federal Action: November 2008						

Indian Canyon Drive Widening – RIV 001203 and RIV 990727

March 2008

NEPA Delegation – Project Type (check appropriate box)									
Exempt		Section 6004 – Categorical Exemption		Section 6005 – Non- Categorical Exemption					
<b>Current Progr</b>	ramming Dates (as	appropriate	e)						
	PE/Environmental			ROW	CON				
Start	In progress		2008	2009	2009				
End Nov 2008			2008	2009	2010				

Project Purpose and Need (Summary): (attach additional sheets as necessary)

The purpose of the project is to improve current and future traffic capacity and Level of Service (LOS). The roadway segment was calculated to have LOS C in 2001 (KOA 2002). Modeling established that this LOS will quickly deteriorate to LOS F. The proposed project is intended to reestablish traffic operation on the roadway segment to LOS C and to maintain this level until 2030.

Indian Canyon Drive and I-10 in the vicinity of Indian Avenue are fast-growing transportation corridors in the Coachella Valley. Continued development in the immediate area has necessitated the reconfiguration of the I-10/Indian Avenue interchange and the widening of Indian Canyon Drive (Indian Canyon Drive becomes Indian Avenue north of its intersection with I-10). The County of Riverside has designated Indian Canyon Drive as a 39-meter-wide (128-foot-wide) Arterial in their General Plan. The Federal Highway Administration (FHWA) and the California Department of Transportation (Department) have designated Indian Canyon Drive as a National Highway System Connector from I-10 to the Palm Springs Regional Airport. The Palm Springs General Plan has designated Indian Canyon Drive as a 34-meter-wide (110-foot-wide) Major Thoroughfare.

Indian Canyon Drive provides access to a new Amtrak train station, via Palm Springs Station Road, that was constructed to serve the western portion of the Coachella Valley. A Foreign Trade Zone is planned adjacent to the train station that is predicted to attract a high volume of truck traffic. There is also an existing truck stop on the northwest quadrant of the Garnet Avenue/Indian Canyon Drive intersection. The Indian Canyon Drive/Garnet Avenue intersection is currently congested during peak periods, resulting in lengthy queues. Average daily traffic on Indian Canyon Drive between Garnet Avenue and Palm Springs Station Road is forecast to more than double from the 2001 baseline traffic volumes by the Year 2015. Volumes are projected to continue to increase through 2025.

Roadway segment traffic operation was modeled at LOS C in 2001. Forecasting of future volumes and modeling of the resulting operational conditions indicates a rapid deterioration to LOS F that would continue to worsen over time. The proposed project is needed to restore current roadway segment operation to LOS C and to maintain this level until 2030.

An additional factor establishing the need for the project is the existing poor sufficiency rating of the Indian Canyon Drive Bridge. The Highway Bridge Replacement and Rehabilitation Program (HBRRP) states that the intent of the program "...is to rehabilitate or replace bridges that are unsafe because of structural deficiencies, physical deterioration, or structural obsolescence. Deficient highway bridges eligible for replacement or rehabilitation must be over waterways, other topographical barriers, other highways, or railroads." Indian Canyon Drive Bridge spans the Union Pacific Railroad tracks. It qualifies for HBRRP funding because the structure received a sufficiency rating of 74 in the Department Structure Inventory and Appraisal Report. The primary reason for the poor sufficiency rating was a low geometry rating.

#### **Surrounding Land Use/Traffic Generators** (especially effect on diesel traffic)

Several businesses, many of them freeway-oriented commercial enterprises, are located in the study area and in the immediate vicinity. Two fast-food restaurants and two gas stations are located at or near the Indian Canyon Drive/Garnet Avenue intersection. Other nearby businesses are a warehouse and a welding company.

Palm Springs Rail Station is located on the west side of Indian Canyon Drive and is accessed by Palm Springs Station Road.

To the south of the Build Alternative (Locally Preferred) site, the Whitewater River area precludes the construction of structures. About 2.7 kilometers (1.7 miles) to the south of Palm Springs Station Road is residential land use.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
Opening year is 2010. The projected AADT for both Build and No Build scenarios is 12,525
northbound, 13,940 southbound, for a total of 26,465 AADT. Build and No Build LOS would be C and F
respectively. Heavy truck fraction in 2002 was less than 1 percent, but an 8 percent value was
conservatively used by the City for buildout traffic analysis. The 8 percent would result in an opening
year truck volume of approximately 2,120.

## RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

The horizon year is 2030. The forecast traffic volume for both Build and No Build scenarios is 21,109 northbound, 18,983 southbound, for a total of 40,092 AADT. Build and No Build LOS would be C and F respectively. Heavy truck fraction in 2002 was less than 1 percent, but an 8 percent value was conservatively used by the City for buildout traffic analysis. The 8 percent would result in an opening year truck volume of approximately 3,210.

# Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

The facility is not an interchange or intersection.

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build crossstreet AADT, % and # trucks, truck AADT

The facility is not an interchange or intersection.

Describe potential traffic redistribution effects of congestion relief (impact on other facilities)

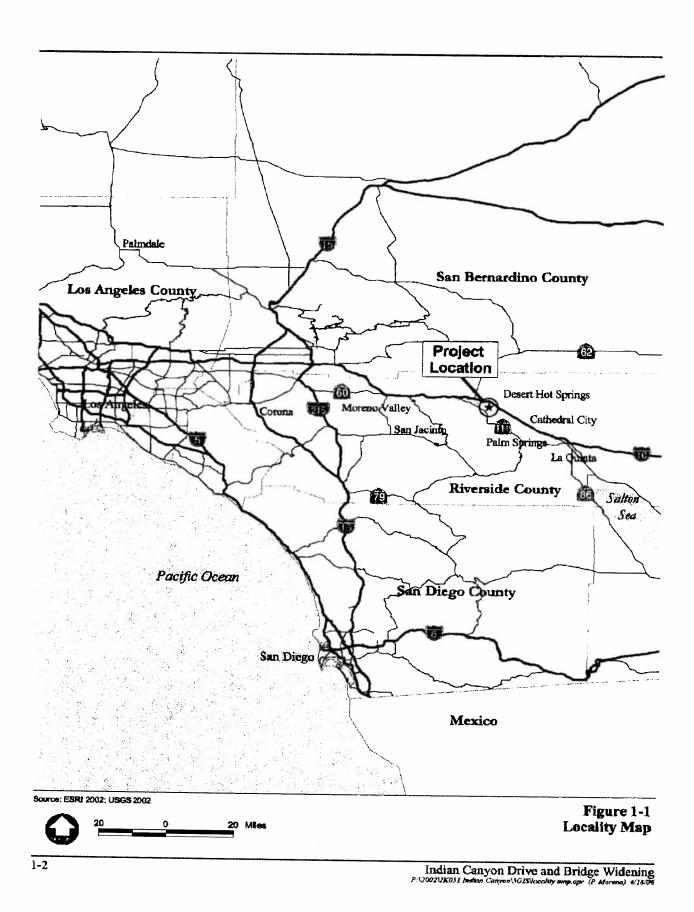
Widening of Indian Canyon Drive would provide congestion relief at the intersection of Indian Canyon Drive and Garnet Avenue. The intersection would operate at LOS C in both the AM and PM peak hours in the horizon year.

**Comments/Explanation/Details** (attach additional sheets as necessary)

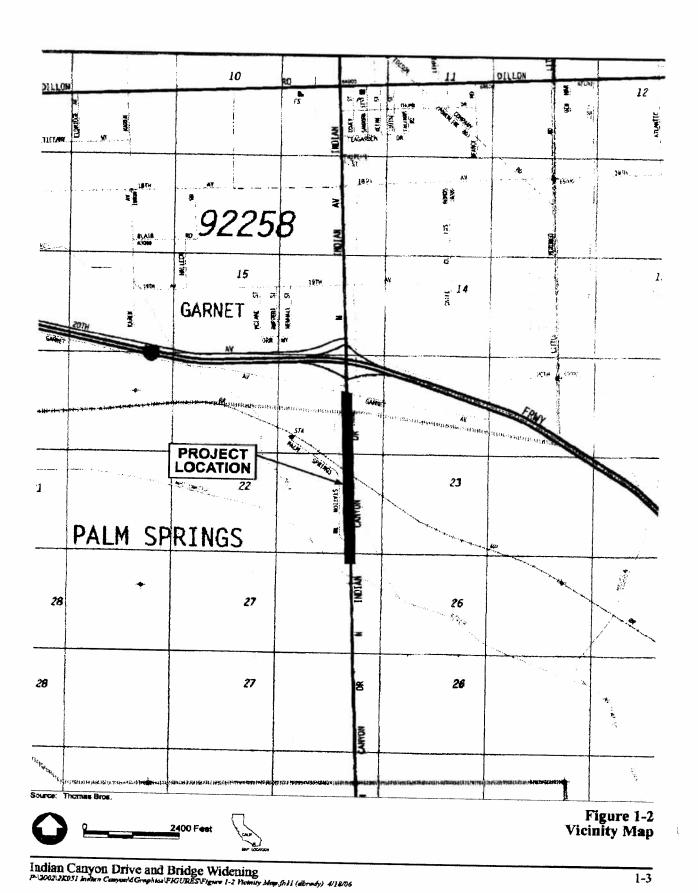
This project should be classified as **not a POAQC.** This conclusion is based on the following reasons:

The forecast horizon year volume of 40.092 AADT is well below the 125,000 AADT threshold suggested in the Final PM Hotspot document as an example of a highway that might be a POAQC. Similarly, the conservatively estimated horizon year truck volume of 3,210 AADT is well below the 10,000 AADT threshold suggested in the Final PM Hotspot document as an example of a highway that might be a POAQC.

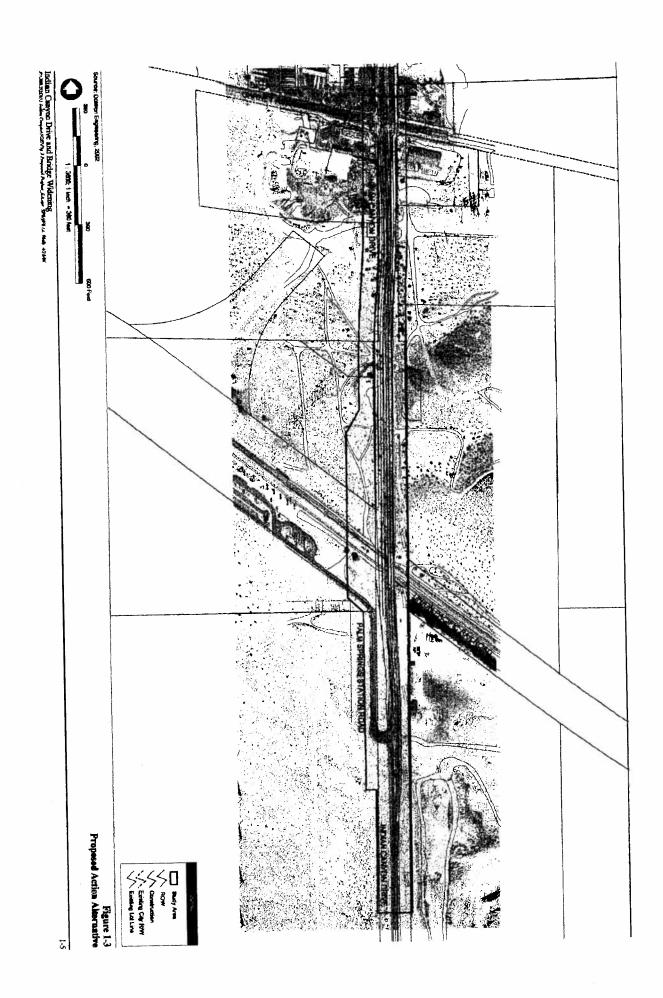
The project would not cause an adverse impact to congested intersections or other transportation facilities.



22



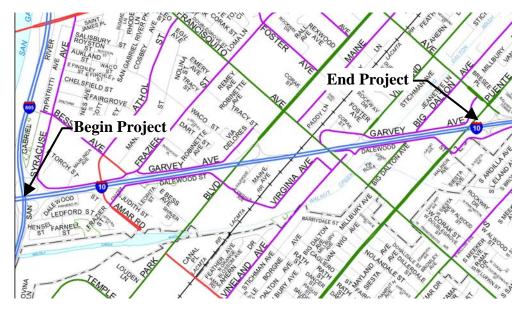
23



4.5 Review of Qualitative PM Hot Spot Analysis

# Qualitative PM<sub>2.5</sub> Hot-Spot Analysis

## CONSTRUCT HIGH OCCUPANCY VEHICLE (HOV) LANES



Interstate 10, from PM 31.2 to PM 33.4
IN LOS ANGELES COUNTY, CALIFORNIA
FROM Interstate 605
TO Puente Avenue

Caltrans EA: 07-11707 Project ID: LA01342

*Prepared by* 

# California Department of Transportation District 7

Division of Planning, Public Transportation, and Local Assistance Office of Environmental Engineering and Corridor Studies 100 South Main Street Los Angeles, CA 90012

**April 2008** 

#### Introduction

The United States Environmental Protection Agency (EPA) promulgated a National Ambient Air Quality Standard (NAAQS) for PM<sub>2.5</sub> on July 18, 1997, along with a revised standard for ozone. The EPA then published their final rule on PM<sub>2.5</sub> designations and classifications in the Federal Register on January 5, 2005, and established areas designated as nonattainment, unclassifiable or attainment/classifiable. The EPA again published a final rule on March 10, 2006 (became effective as of April 5, 2006) that supercedes the FHWA September 21, 2001 "Guidance for Qualitative Project-Level Hot-Spot Analysis in PM<sub>10</sub> Nonattainment and Maintenance Areas," and establishes conformity criteria and procedures for transportation projects to determine their impacts on ambient PM<sub>2.5</sub> and PM<sub>10</sub> levels in nonattainment and maintenance areas (71 FR 12468). The March 10, 2006 final rule requires a qualitative PM<sub>2.5</sub> and PM<sub>10</sub> hot-spot analysis to be completed for a project of air quality concern (POAQC). The final rule in 40CFR93.123(b)(1) defines the POAQC as:

- (i) New or expanded highway projects that have a significant number of or significant increase in diesel vehicles:
- (ii) Projects affecting intersections that are at Level-of-Service (LOS) D, E, or F with a significant number of diesel vehicles, or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- (iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
- (iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
- (v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM<sub>2.5</sub> and PM<sub>10</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The project under study in this Qualitative PM<sub>2.5</sub> Hot-Spot analysis (Analysis) proposes to construct a high occupancy vehicle (HOV) lane in each direction of travel along the Interstate 10 (I-10) approximately from its junction with I-605 at PM 31.2 to Puente Avenue at PM 33.4. Based on current and forecast traffic data, the I-10 corridor within the limits of this project experiences and is projected to have a significant number of diesel vehicles; and therefore this project is considered to be a POAQC as described in 40CFR93.123(b)(1)(i) and requires this Analysis.

This Analysis has been prepared according to the procedures and methodology provided in the "Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas" jointly published by EPA and FHWA in March 2006 (March 2006 Guidance).

## **Project Description and Location**

This I-10 corridor within the project limits is commonly referred to as the San Bernardino Freeway and is a major east-west freeway used for intraregional, interregional, and interstate travel and shipping in and out of the Southern California. The I-10 is a part of the Federal National Highway

System and is a major commuter route linking Los Angeles, San Bernardino, and Riverside Counties. The I-10 is a major truck route of key economic importance in Southern California.

The I-10 is currently an eight-lane freeway throughout the most of the project limits from I-605 to Puente Avenue. Recurrent congestion occurs westbound in the morning peak hours and eastbound in the evening peak hours. The majority of the project study area currently operates at capacity in the morning and evening peak hours.

Eastern Los Angeles County and western San Bernardino County are continuing to grow at a rapid rate, including development of both residential and employment land uses. Peak period traffic demand on I-10 currently exceeds capacity and, as a result of existing and forecasted growth, is expected to continue to exceed capacity in the future. The purpose of the proposed I-10 HOV lane project is to promote multiple-person ridership to assist in relieving congestion on this section of I-10 by:

- Providing for a continuous HOV system by connecting existing and approved HOV facilities west of I-605;
- Increasing the person carrying capacity of this section of I-10 by encouraging and supporting the use of shared-ride modes.

The proposed project passes through the City of Baldwin Park (City) in the eastern Los Angeles County. The project area is generally urbanized and the communities along the proposed project were largely developed in the 1940s and 1950s. Existing land uses in the City north of I-10 include commercial (Baldwin Park Town Center, The Sierra Center, small retail shops, motels, restaurants, offices), single and multiple-family residential, trailer parks, institutional and public (Foster School, City of Baldwin Park Maintenance Yard). Existing land uses in the City south of I-10 include single and multiple-family residential, vacant land, open space (Roadside Park), commercial (small retail service shops, motel, auto dealership), light industrial uses and institutional (Garden Care Center and Kaiser Permanente).

An Initial Study/Environmental Assessment (IS/EA) leading to a Mitigated Negative Declaration/Finding of No Significant Impact (MND/FONSI) was prepared by the Department and was approved by the FHWA in January 2003. In February 2006, the Department prepared an Environmental Reevaluation for the proposed project because the design of the proposed project had lasted more than 3 years. The FHWA approved the Environmental Reevaluation, demonstrating that the scope of the proposed project had not changed since the approval of the MND/FONSI.

The project proposes to improve traffic flow by adding one HOV lane in each direction along I-10 from its junction with I-605 to Puente Avenue; and to improve ramps within the limits by modifying access. The proposed project is currently in design phase with target dates to advertise for bids in May or June 2008; to commence construction in October 2008; and to complete construction by April 2012. Traffic data are projected to 2012 and 2030 to demonstrate fully developed traffic conditions following the opening of completed facilities in 2012 as well as to consider the full time frame of current transportation plans in the region.

The projects are identified in the 2004 Regional Transportation Plan (2004 RTP) and in the 2006 Regional Transportation Improvement Program (2006 RTIP) as LA01342 (inclusive of EA 07-11707). The 2004 RTP was adopted in April 2004 and was found to conform by the FHWA on June 7, 2004. The 2006 RTIP was adopted in July 2006 and the FHWA made its conformity determination on October 2, 2006. The proposed project, LA01342, is identified as a Transportation Control Measure (TCM) project and its timely implementation is a crucial element in reduction of air pollutant emissions from roadway transportation sources.

### PM<sub>2.5</sub> Hot-Spot Analysis Methodology

The project is located within the South Coast Air Basin (SCAB) that is designated as a federal nonattainment area for  $PM_{2.5}$ ,  $PM_{10}$ , and 8-hour ozone among other criteria pollutants. The project is considered as a POAQC as discussed above; and therefore, a qualitative hot-spot analysis for both  $PM_{2.5}$  and  $PM_{10}$  is deemed necessary to satisfactorily meet the conformity requirements in accordance with the March 10, 2006 final rule. The MND/FONSI and its reevaluation approved in January 2003 and February 2006, respectively, however, have provided an appropriate qualitative hot-spot analysis for  $PM_{10}$  at the time. Therefore, this Analysis addresses transportation conformity requirements for  $PM_{2.5}$  only.

A hot-spot analysis is defined in the 40CFR 93.101 as an estimation of likely future localized pollutant concentrations and a comparison of those concentrations to the relevant air quality standards. A project-level hot-spot analysis assesses the air quality impacts on a scale smaller than an entire nonattainment or maintenance area such as a congested freeway corridor. Such an analysis is a means of demonstrating that a transportation project meets Clean Air Act (CAA) conformity requirements to support state and local air quality goals with respect to potential localized air quality impacts.

CAA Section 176(c)(1)(B) is the statutory criterion that must be met by all projects in nonattainment and maintenance areas that are subject to transportation conformity. Section 176(c)(1)(B) states that federally supported transportation projects must not "cause or contribute to any new violation of any standard in any area; increase the frequency or severity of any existing violation of any standard in any area; or delay timely attainment of any standard or any required interim emission reductions or other milestones in any area."

## **Types of Emissions Considered**

In accordance with the March 2006 Guidance, this Analysis will be based on directly emitted PM<sub>2.5</sub> emissions and will consider tailpipe, brake wear, and tire wear PM<sub>2.5</sub> emissions. PM<sub>2.5</sub> precursors and secondary particles are not considered in this Analysis; but they are considered as part of the regional emission analysis prepared for the conforming RTP and RTIP

Vehicles cause dust from paved and unpaved roads to be re-entrained, or re-suspended, in the atmosphere. According to the March 2006 final rule, road dust emissions are only to be considered in  $PM_{2.5}$  hot-spot analyses if the EPA or the state air agency has made a finding that such emissions are a significant contributor to the  $PM_{2.5}$  air quality problem (40CFR93.102(b)(3)). The South

Coast Air Quality Management District (SCAQMD) has prepared and adopted in June 2007, a Final 2007 Air Quality Management Plan (Final 2007 AQMP) in which the paved road dust ranks high among the top ten categories of directly emitted PM<sub>2.5</sub> in the SCAB. The California Air Resources Board (CARB) has incorporated the adopted 2007 AQMP for the SCAB as part of their State Implementation Plan (SIP) for PM<sub>2.5</sub> and has submitted to EPA for approval. In anticipation of the EPA action on the PM<sub>2.5</sub> SIP, the re-entrained PM<sub>2.5</sub> road dust has been considered in this Analysis.

According to the project schedules, the construction will not last more than 5 years, and construction-related emissions may be considered temporary; therefore, any construction-related PM<sub>2.5</sub> emissions due to the proposed project will not be included in this Analysis. The construction of this project will comply with the SCAQMD Fugitive Dust Rules (Rule 403) for any fugitive dusts emitted during the construction of this project. Excavation, transportation, placement, and handling of excavated soils will result in no visible dust migration. A water truck or tank will be available within the project limits at all times to suppress and control the migration of fugitive dusts from earthwork operations. The project will comply with any state, federal, and/or local rules and regulations developed as a result of implementing control and mitigation measures proposed as part of their respective SIPs.

### **National Ambient Air Quality Standard**

Nonattainment and maintenance areas are required to attain and maintain two standards for  $PM_{2.5}$  as follows:

- 24-hour standard: 65 micrograms per cubic meter (μg/m³)
- Annual standard: 15 μg/m<sup>3</sup>.

Although the EPA has recently reduced the  $PM_{2.5}$  24-hour standard from 65 to 35  $\mu g/m^3$  based on the 2004–2006 monitored data with an effective date of December 2006, this Analysis will consider the 1997  $PM_{2.5}$  standard noted above (65  $\mu g/m^3$ ) because this is the standard upon which the current  $PM_{2.5}$  nonattainment designations were based. New area designations based on the new  $PM_{2.5}$  standard of 35  $\mu g/m^3$  are anticipated to become effective early 2010. This Analysis will consider both 24-hour and annual standards for  $PM_{2.5}$  as noted above.

The 24-hour standard is based on a 3-year average of the 98th percentile of 24-hour  $PM_{2.5}$  concentrations; and, the current annual standard is based on a 3-year average of annual mean  $PM_{2.5}$  concentrations.

## Climate and Meteorology of the South Coast Air Basin

The climate in and around the project area, as with all of Southern California, is controlled largely by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. It maintains moderate temperatures and comfortable humidity, and limits precipitation to a few storms during the winter "wet" season. Temperatures are normally mild, except in the summer months, which commonly bring substantially higher temperatures. In all portions of the SCAB,

temperatures well above 100 degrees Fahrenheit have been recorded in recent years. The annual average temperature (over three decades) in the SCAB where this project is proposed is approximately 64 degrees Fahrenheit.

Winds in the project area are usually driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime onshore sea breezes. At night the wind generally slows and reverses direction traveling towards the sea. Wind direction will be altered by local canyons, with wind tending to flow parallel to the canyons. During the transition period from one wind pattern to another, the dominant wind direction rotates into the south and causes a minor wind direction maximum from the south. The frequency of calm winds (less than 2 miles per hour) is less than 10 percent. Therefore, there is little stagnation in the project vicinity, especially during busy daytime traffic hours.

Southern California frequently has temperature inversions that inhibit the dispersion of pollutants. Inversions may be either ground based or elevated. Ground based inversions, sometimes referred to as radiation inversions, are most severe during clear, cold, early winter mornings. Under conditions of a ground-based inversion, very little mixing or turbulence occurs, and high concentrations of primary pollutants may occur local to major roadways. Elevated inversions can be generated by a variety of meteorological phenomena. Elevated inversions act as a lid or upper boundary and restrict vertical mixing. Below the elevated inversion, dispersion is not restricted. Mixing heights for elevated inversions are lower in the summer and more persistent. This low summer inversion puts a lid over the SCAB and is responsible for the high levels of ozone observed during summer months in the SCAB.

The 30-year average temperature, from 1971 to 2000, using data obtained from the Western Region Climate Center's Montebello meteorological station (#045790) shows a wintertime low of 47.4 degrees Fahrenheit in December. The summertime high is averaged at 88.6 degrees Fahrenheit in July. The rainfall season is from November to April with an annual average of 16.75 inches.

## **Ambient and Projected Concentration Data**

Ambient PM<sub>2.5</sub> concentration data were obtained from the Azusa monitoring station; and were reviewed to establish the current ambient level within the project limits and to help establish future localized pollutant concentrations as affected by the proposed project. The Azusa station is located approximately 0.42 mile north of I-210 and approximately 5 miles northeast from the easternmost end of the proposed project. Figure 1 illustrates the proximity of these monitoring stations to the freeway and to the proposed projects.

The portion of I-210 by which the Azusa monitoring station is located currently carries the following roadway traffic volumes:

 Table 1
 Roadway Traffic near the Air Quality Station and the Proposed Project

Location	Total Vehicle AADT	3+ Axle AADT	Total % Truck (3+ Axle)
I-10 within the proposed project limits (I-10 from PM 31.151 to 34.457)	219,000 to 258,000	10,366	4.0 to 4.7
Azusa monitoring station (I-210 at Irwindale Ave. Interchange, PM 37.862)	248,000	10,488	4.2

Source: Caltrans Traffic and Vehicle Data Systems Unit accessed in April 2008

As indicated in Table 1, the portion of I-10 within the project limits, currently experiences volumes comparable to the portion of I-210 where the monitoring station is located. Percentage and volume of trucks carried along the portion of I-210 adjacent to the Azusa monitoring station is deemed comparable to those within the project limits as Table 1 indicates that the truck percentages and volumes adjacent to the Azusa monitoring station fall within the ranges experienced throughout the project limits.

A review of readily available aerials and land use data in the EPA data inquiry website indicate that the Azusa station is located in an area with mixed commercial and residential uses. The land use pattern along the proposed project limits also includes residential, commercial, and light to restricted industrial, as indicated in the approved MND/FONSI.

Based on the comparison of the traffic volumes, land uses, and the proximity to the freeway, the ambient concentration data measured at the Azusa monitoring station are deemed representative for comparison to the proposed project. Table 2 summarizes ambient  $PM_{2.5}$  monitoring data at the Azusa monitoring station. Figure 2 illustrates the monitored concentrations at the Azusa monitoring station and compares them with the current and future respective standards.

**Table 2** Ambient PM<sub>2.5</sub> Monitoring Data

	2002	2003	2004	2005	2006	2007
3-year average 24-hour 98th percentile	58.0	56.0	53.7	54.3	48.3	45.0
Exceeds federal 24-hour standard (65 µg/m <sup>3</sup> )?	No	No	No	No	No	No
3-year national annual average	21.0	20.7	19.5	18.2	16.9	15.8
Exceeds federal annual standard (15 μg/m³)?	Yes	Yes	Yes	Yes	Yes	Yes

Based on data from http://www.epa.gov/air/data/monvals.html?st~CA~California accessed on 4/4/2008.

The monitored data indicate that the Azusa monitoring station has not exceeded the federal 24-hour  $PM_{2.5}$  standard (65  $\mu g/m^3$ ) over the last six years; and has shown constant decrease in the 3-year average 24-hour ambient concentrations except in 2005 when the concentration slightly increased by approximately 1%. Three-year annual average  $PM_{2.5}$  concentrations monitored at the Azusa monitoring station have exceeded the federal annual  $PM_{2.5}$  standard of 15  $\mu g/m^3$  between

2002 and 2007. However, as illustrated in the 24-hour monitored concentrations as well, the annual average concentrations monitored at the Azusa monitoring station also exhibit a constant decline over the last six years. The monitored  $PM_{2.5}$  concentrations as well as the current and future federal  $PM_{2.5}$  standards are illustrated in Figure 2.

These monitored concentrations and their declining trends are consistent with discussions in the approved 2003 AQMP and the Final 2007 AQMP by the SCAQMD. The isopleth maps in the 2003 AQMP (Figure 3) and the Final 2007 AQMP (Figure 4) indicate that the monitored concentrations in the area of Azusa station have been reduced although they do still exceed he federal annual average standard.

The declining trends in the future  $PM_{2.5}$  baseline concentrations are discussed in the Final 2007 AQMP. Although the Final 2007 AQMP does not provide reference to the Azusa monitoring station, the Final 2007 AQMP does indicate that a reduction below the federal  $PM_{2.5}$  annual average standard will be achieved in Los Angeles (approximately  $14 \mu g/m^3$ ) and Burbank (13 ug/m3) by as early as 2015. The Final 2007 AQMP also indicates that the new federal  $PM_{2.5}$  24-hour standard (35  $\mu g/m^3$ ) will be achieved at the Burbank Station by 2024 with a projected baseline concentration of 33  $\mu g/m^3$ ; but not at the Los Angeles – Main St. Station (projected at 40  $\mu g/m^3$ ). The current 1997 federal  $PM_{2.5}$  24-hour standard of 65  $\mu g/m^3$ , nevertheless, is currently attained at both monitoring stations. As evidenced by the Final 2007 AQMP, a further decrease in the 24-hour and annual average concentrations is anticipated by the regional horizon year, 2030.

The PM<sub>2.5</sub> SIP has recently been submitted to the EPA; and an emission budget adequacy/inadequacy determination is anticipated in the near future.

#### **Current Traffic Conditions**

Existing average daily traffic volumes, truck percentage, and average daily truck volumes along I-10 within the project limits are shown in Table 1. Future traffic data have been projected based on the current conditions and future improvements; and are summarized in Tables 3 and 4. Table 1 indicates that the facility currently experiences truck volume of 10,366 or 4.0 to 4.7% (for 3+ axles only). In terms of traffic congestion experienced by motorists, the traffic analysis for this project described the facility as operating at LOS F, indicating that typical motorists would experience traffic congestion for more than 15 minutes but less than 1 hour during peak hours.

### **Traffic Changes Due to the Proposed Projects**

The project proposes to widen freeway mainline to add an HOV lane in each direction; increase the capacity of I-10; and modify interchanges with local streets. This type of projects improves freeway mainline and interchange operations by reducing traffic congestion and improving ingress/egress movements. Tables 3 and 4 below summarize average traffic volumes and speeds projected along the I-10 within the project limits. Traffic projections were conducted for over 7 individual segments within the project limits; however, the future projections in Tables 3 and 4 are shown as averages over all the segments. According to Tables 3 and 4, the Build Alternative is

anticipated to result in improvements in vehicle speeds along the I-10 corridor as well as in the surrounding areas due to the anticipated increase in capacity and improvement in operations.

Traffic and speed data along the I-10 corridor and the surrounding areas were considered for this Analysis and in calculating  $PM_{2.5}$  emissions, including  $PM_{2.5}$  re-entrained road dust. Vehicle miles traveled (VMTs) on arterials, secondary streets, and portions of neighboring freeways were considered to encompass a portion of I-605 as summarized in Table 5. The summary in Table 5 indicates that the implementation of the proposed project helps reduce traveling on other surrounding freeways and arterials/secondary streets while an increase is anticipated in total VMTs along this I-10 corridor.

**Table 3** Average Daily Volumes and Speeds in 2012 within the project limits

	ADT		Average Peak Period	
	Total	Truck	Speeds, MPH	
No-Build	242,043	16,626	45 to 56	
Build	207,871 MF / 35,986 HOV	16,793	55 to 60	

**Table 4** Average Traffic Volumes and Speeds in 2030 within the project limits

_	ADT		Average Peak Period	
	Total	Truck	Speeds, MPH	
No-Build	265,900	18,270	40 to 53	
Build	231,357 MF / 40,129 HOV	18,556	51 to 58	

 Table 5
 Summary of Vehicle Miles Traveled for The I-10 Corridor and Surrounding Areas

	Freeways		Arterials		
	Mixed Flow	HOV	Major	Primary	Secondary
2007 Existing	2,800,204	105,878	1,325,296	1,074,790	35,832
2012 No-Build	2,850,591	130,602	1,373,540	1,129,051	39,496
2012 Build	2,813,603	190,841	1,359,326	1,118,853	37,579
2030 No-Build	3,031,984	219,605	1,547,221	1,324,389	52,689
2030 Build	2,939,513	370,204	1,511,683	1,298,896	47,896

#### PM<sub>2.5</sub> Emissions

ARB's latest emission model, EMFAC2007, was utilized in estimating existing and future project-level  $PM_{2.5}$  emissions for the project alternatives. Table 6 summarizes tailpipe, brake wear, and tire wear  $PM_{2.5}$  emissions while Table 7 below summarizes re-entrained  $PM_{2.5}$  road dust.

**Table 6** Existing and Future PM<sub>2.5</sub> Emissions by Project Alternatives (lb/day)

	Existing	Opening, 2012	Horizon, 2030
No-Build	536	479	389
Build		474	383

Summaries of PM<sub>2.5</sub> emissions in Tables 6 and 7 indicate that the implementation of the projects would result in reduction of PM<sub>2.5</sub> emissions when compared to the No-Build scenario. It should be noted that this reduction in the Build emissions has been resulted despite its overall increase in the truck and total volumes along the I-10 within the project limits. The State vehicle codes prohibit the use of an HOV lane by trucks with 3 or more axles and school buses; therefore, the addition of an HOV lane in the eastbound and westbound directions would accommodate primarily gasoline-fueled light duty and alternative fueled (typically CNG or LNG) transit vehicles. State and local transit fleet rules essentially prohibit the acquisition of diesel-powered transit vehicles for use in the SCAB.

Re-entrained PM<sub>2.5</sub> road dust was estimated based on the existing and projected traffic data; and was computed using the emission factor equations provided in the Fifth Edition, Volume I of EPA's AP-42 document dated November 1, 2006. As indicated above, re-entrained PM<sub>2.5</sub> road dust has been considered in this Analysis in anticipation of the EPA action on the PM<sub>2.5</sub> SIP submitted recently by the CARB.

**Table 7** PM<sub>2.5</sub> Re-entrained Road Dust by Project Alternatives (lb/day)

	Existing	Opening, 2012	Horizon, 2030
No-Build	6	7	9
Build		6	8

As indicated in Table 7, implementation of the proposed project is anticipated to result in reduction of re-entrained  $PM_{2.5}$  road dust. According to Table 5, the proposed project is anticipated to affect traffic patterns in the immediate area along the I-10 within the project limits; and to redistribute traveling from arterials and secondary streets on to the freeways as suggested by the changes (respective increase and decrease thereof) to the VMTs on the respective roadway facilities. According to the EPA's AP-42, surface secondary streets have higher silt loading factors than the freeways; and therefore, a decrease in VMTs on the secondary streets is anticipated to result in projected reduction of re-entrained  $PM_{2.5}$  road dust by 2012 and 2030 when compared to the No-Build scenario.

#### CONCLUSIONS

Transportation conformity is required under CAA Section 176(c) to ensure that federally supported highway and transit project activities are consistent with the purpose of the SIP. Conformity to the purpose of the SIP means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant AAQS. As required by the March 10, 2006 final rule, this Analysis demonstrates that this project meets the CAA conformity requirements to support state and local air quality goals with respect to potential localized air quality impacts as indicated below.

Historical meteorological and climatic data support that the regional and local meteorological and climatic conditions have been relatively consistent within the last 30 years and likely consistency is anticipated by the horizon year of 2030. In addition, no significant changes to the current general terrain and geographic locations of the project in relation to the coastal SCAB areas are anticipated.

Monitoring of  $PM_{2.5}$  emissions have only recently initiated and do not have a long trail of monitored data available; however, based on the recent data at the Azusa monitoring station, there is a declining trend of background  $PM_{2.5}$  concentrations within the project area. As discussed in the Final 2007 AQMP, all areas within the SCAB will be in attainment of the federal annual and 24-hour standards by 2015; and the implementation of the 8-hour ozone control strategy will continue to lower annual  $PM_{2.5}$  concentrations.

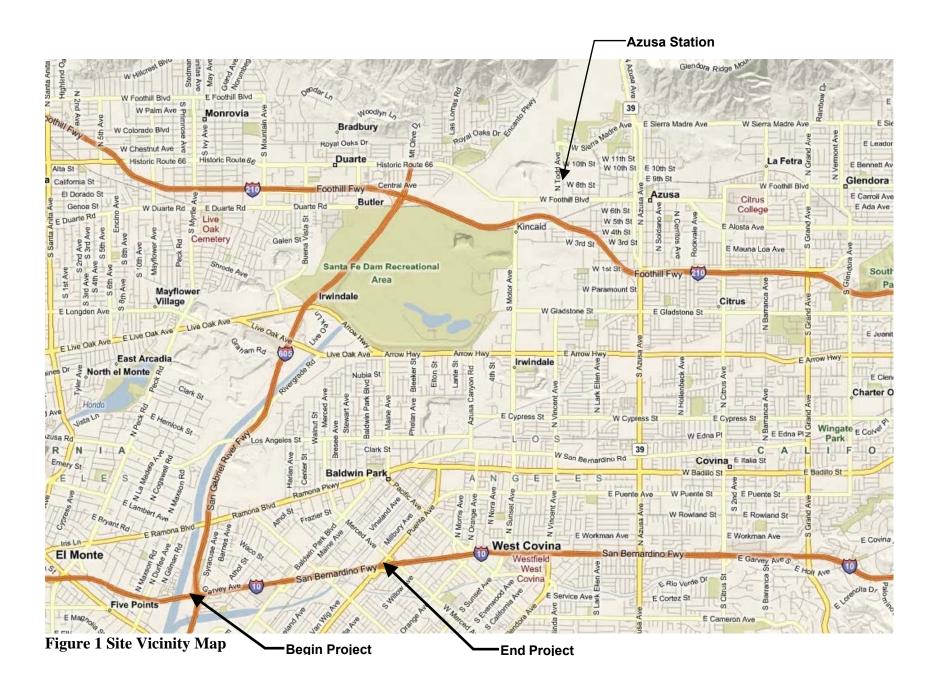
Federal regulations and the State's Diesel Risk Reduction Plan require future diesel vehicles to have substantially cleaner engines and to use fuels with lower sulfur contents. These federal and state requirements would help further reduce PM<sub>2.5</sub> emissions in the future by essentially lowering per-vehicle emissions for each of the diesel vehicles.

As indicated in Tables 6 and 7, the proposed project would result in lower  $PM_{2.5}$  emissions than the No-Build scenario. This decrease in the PM emissions is the result of increase in vehicle speeds and reduction of congestion anticipated with implementation of the projects.

Traffic volumes along the I-10 within the project limits are forecasted to increase when compared to the No-Build as summarized in Tables 3 and 4. Redistribution and/or reduction of the overall traveling in the surrounding area, measured in VMTs, however, are expected with the implementation of the projects; and as a result, re-entrained  $PM_{2.5}$  road dust emissions are anticipated to decrease when compared to the No-Build.

The historical meteorological and climatic data, monitored PM emissions data and their declining trends, current and projected traffic data, and the Federal regulations and the State's Plan, support the assertion that the project will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS. Activities of this project should, therefore, be considered that they are consistent with the purpose of the SIP and it should be determined that this project conforms to the requirements of the CAA.

# **Figures**



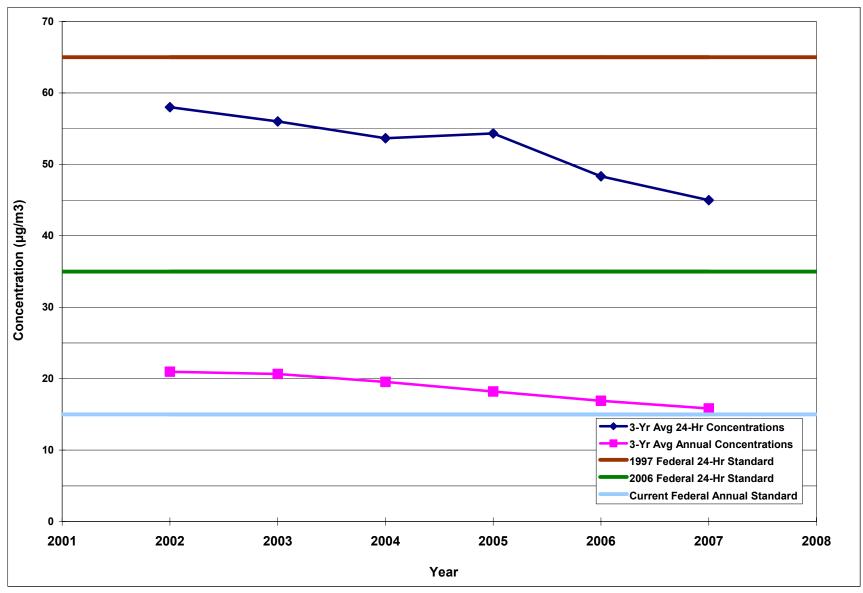


Figure 2 Ambient  $PM_{2.5}$  Monitoring Data at Azusa Monitoring Station

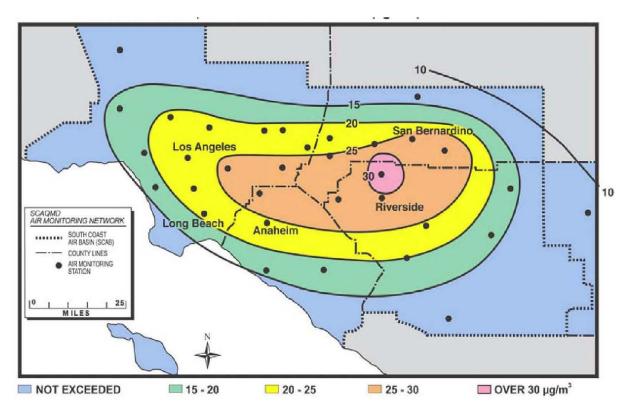
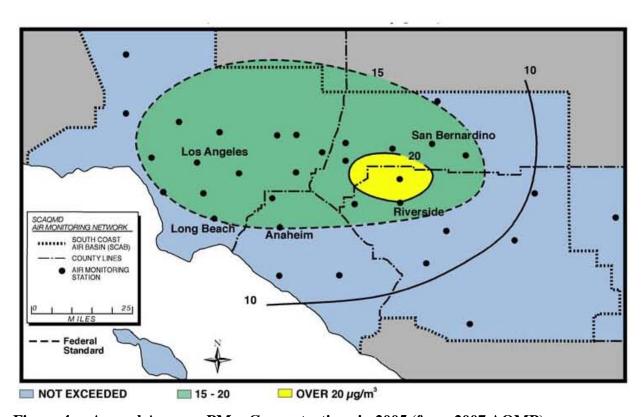


Figure 3 Annual Average PM2.5 Concentrations in 2001 (from 2003 AQMP)



 $Figure\ 4 \quad \ Annual\ Average\ PM_{2.5}\ Concentrations\ in\ 2005\ (from\ 2007\ AQMP)$